

Projet de structure 1A

3.0 credits	15.0 h + 30.0 h	2q

Teacher(s):	
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The first part of the course is a self-contained overview of the field of structures. We discuss different ways of classifying structural elements and systems. Then, we introduce fundamental principles of mechanics (statics) that are generally applicable to the analysis of any structure. In the last part of the course, we consider the loads that structures are designed to carry and generally discuss the structural analysis and design process as it occurs in the building context.
Aims :	The aim of the course is to provide an overview and introduction to structures and their use in buildings. The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Content :	In this course, the students will have to design a structure by themselves, typically a bridge. The structure will first be designed following the guidelindes that were provided in class. They will use professional software tools in order to validate their design. Then, they will realize in our labs a reduced scale version of their structure. A price will grant the best project.
Other infos :	Naught
Cycle and year of study:	≥ Bachelor in Engineering : Architecture > Bachelor in Engineering
Faculty or entity in charge:	GC